

REMARKS

Claims 1-25 of the present application remain pending. Claims 1, 16, and 22 are amended herein. No new matter is added as a result of the Claim amendments.

CLAIM REJECTIONS 35 U.S.C. § 103(a)

Claims 1-8, 10-19, 21, 22, 24, and 25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kent et al. (U.S. Patent No. 6,492,979) hereinafter referred to as "Kent" and in view of Donohue et al. (U.S. Patent No. 6,262,717) hereinafter referred to as "Donohue." The Applicants respectfully submit that the embodiments of the present invention as recited in Claims 1-25 are not rendered obvious by the above cited references.

The Applicants respectfully assert that Kent does not teach or suggest a cover of any sort, much less a single-piece bezel-less top cover that encloses a handheld electronic device as claimed. Claim 1 of the present invention recites:

a single-piece bezel-less top cover enclosing said handheld electronic device to allow mechanical transfer between said top cover and said plurality of pressure activated sensors, wherein said pressure activated sensors can be activated by mechanical pressure applied to the external surface of said single-piece cover enclosure.

Similarly, the Applicants respectfully assert that Kent does not teach or suggest the recited limitations of Claim 16 comprising:

a transparent single-piece cover enclosing said handheld electronic device that is bezel-less and is disposed over a top surface to a display

mechanism and operable to allow mechanical transfer of pressure to the display mechanism.

Additionally, the Applicants respectfully assert that Kent does not teach or suggest the recited limitations of Claim 22 comprising:

a transparent single-piece cover enclosing said handheld electronic device that is bezel-less and disposed over a top surface of said display mechanism; and

a plurality of pressure activated sensors disposed between said transparent single-piece cover and said back cover and, responsive to pressure asserted on said transparent single-piece cover, operable for registering a contact point on said transparent single-piece cover.

The Applicants respectfully submit that Donohue does not overcome the shortcomings of Kent regarding the above claimed limitations of embodiments of the present invention. More specifically, Donohue does not teach or suggest a single-piece bezel-less top cover that encloses a handheld electronic device as recited in Claims 1, 16 and 22 of the present invention. For example, the Applicants respectfully submit that the "enclosure" of Donohue covers a component of the device (e.g., touch pad 26 of kiosk 23) rather than acting as a cover enclosing the entire device. Column 7, lines 32-35 of Donohue state:

"...the touch pad 21 is preferable protected by a transparent cover plate 31 which overlays and preferably extends beyond the boundary 33 of the touch pad 21; thus the width and length of the cover plate 31 should correspond to, or exceed the of the touch-sensitive surface 26."

In other words, the cover plate of Donohue merely covers the top of the touch pad, but does not enclose the touch pad assembly. The Applicants respectfully submit that this does not teach or suggest a single-piece bezel-less cover that encloses a handheld electronic device as recited in Claims 1, 16, and 22 of the present invention. Instead cover plate 31 of Donohue merely covers a component of the

device (e.g., kiosk 23) rather than the entire device. Furthermore, enclosure 41 of Donohue is embedded within a large kiosk and therefore teaches away from a handheld electronic device as recited in Claims 1, 16, and 22 of the present invention.

The rejection cites column 5, lines 9-11 of Donohue as indicating a single-piece bezel-less top cover that is a rigid cover. The Applicants respectfully assert that Donohue merely teaches a rigid and durable plate that is placed over a touch pad to increase the life of the touch pad. However, there is no suggestion in the cited portion of Donohue that the rigid plate is either bezel-less or that it encloses the electronic device as recited in Claims 1, 16, and 22 of the instant application.

Additionally, the Applicants respectfully submit that Figures 2, 5, 7, and 8 of Donohue clearly show a bezel surrounding cover plate 31 and monitor 25. Furthermore, Figure 4 of Donohue only shows a portion of the enclosure 41 as shown in Figure 2 and would, if cover 51 and cover gasket 53 were included, clearly show a bezel on the top surface of cover plate 31. Therefore, the Applicants respectfully submit that Donohue actually teaches away from the claimed bezel-less cover recited in Claims 1, 16, and 22 of the present invention.

The Applicants further submit that, due to the difference in the size of the devices and the different operating environments in which they are used, it would not be obvious to adapt a cover designed for a device as large as a kiosk for use with a handheld device. For example, a handheld device may be prone to collecting dust,

lint, etc. while being carried by a user. This is especially pronounced in the region of the bezel that surrounds the display/touch pad region of a typical handheld device such as a PDA. Therefore, a bezel-less cover would prove advantageous for users of handheld devices. The Applicants respectfully submit that these considerations are not likely to be considered when designing or using a kiosk. Additionally, a bezel-less cover that encloses a handheld device as recited Claims 1, 16, and 22 presents a cleaner, more stylish appearance which a user of a handheld device may find desirable.

Thus, the Applicants respectfully submit that there is no suggestion in Kent alone or in combination with Donohue of a single-piece bezel-less cover enclosing an electronic device as recited in Claims 1, 16, and 22 of the present invention. Therefore, the Applicants respectfully submit that the objections to Claims 1, 16, and 22 under 35 U.S.C. § 103(a) are overcome.

Referring again to Claims 1, 16, and 22, the rejection indicates that Kent teaches a display assembly for an electronic device comprising: a display mechanism; a plurality of pressure activated sensors; wherein mechanical transfer between said display mechanism and said plurality of pressure activated sensors can be activated by mechanical pressure applied to the external surface of said display mechanism. The Applicants respectfully agree that Kent does not teach or suggest:

a single-piece bezel-less top cover enclosure that encloses the handheld electronic device and allows mechanical transfer between the top cover and the plurality of pressure activated sensors as recited in Claim 1 of the present invention.

The Applicants respectfully submit that Donohue does not overcome the shortcomings of Kent. Specifically, Donohue does not teach or suggest a single-piece bezel-less cover enclosing a handheld electronic device that allows pressure to be transmitted to a plurality of pressure activated sensors and/or to a display mechanism as recited in Claims 1, 16, and 22 of the present invention. The Applicants respectfully assert that Donohue teaches an enclosure for a component (e.g., touch pad assembly 21) of a device (e.g., kiosk 23) rather than a single-piece bezel-less cover that encloses the entire device as recited in Claims 1, 16, and 22 of the present invention. For example, the cover assembly of Donohue comprises a top cover plate 31 that only covers the touch pad assembly 21, but does not enclose the entire touch pad assembly. Additionally, Donohue teaches that enclosure 41 is for enclosing a touch pad 21 disposed within a kiosk 23. However, Donohue does not teach or suggest a single-piece bezel-less cover for kiosk 23 itself, much less for a handheld electronic device.

Additionally, Kent teaches one embodiment that uses projective-capacitive sensors as a primary sensor and one or more force sensors are used to obtain touch validation (Column 3, lines 14-16). In this embodiment, if the projective-capacitive sensor does not detect a touch, the touch is invalidated (Column 3, lines 23-25). In another embodiment of Kent, multiple force sensors are used as the primary sensor to determine touch position coordinates while a projective-capacitive sensor is used as the secondary sensor (Column 3, lines 32-36). In this embodiment, the projective-capacitive sensor is used for touch confirmation to determine whether the

touch was due to a conductive and grounded object (Column 3, lines 36-43). The Applicants respectfully submit that this combination actually teaches away from the present invention by indicating the need two touch sensing mechanisms. Thus, the Applicants respectfully submit that embodiments of the present invention, as recited in Claims 1, 16, and 22, are neither rendered obvious nor suggested by Kent.

Donohue also teaches in Column 6, lines 10-58 the use of a "touch pad" (e.g., touch pad 21), as the pressure sensing device. Additionally, Donohue teaches the use of a touch pad that can detect and register an input by, "even simply bringing a finger substantially near the programmable zone 29." The Applicants respectfully submit that this teaches away from a pressure activated sensor as recited in Claims 1, 16, and 22 of the present invention.

Additionally, the Applicants respectfully submit that the determination of obviousness cannot be based on the hindsight combination of components selectively culled from the prior art to fit the parameters of the present invention. There must be teaching or suggestion within the prior art to select the particular elements, and to combine them in the way they were combined by the inventors. The Applicants respectfully submit that neither Kent nor Donohue teach or suggest the combination of a single-piece bezel-less cover enclosing a handheld electronic device that allows mechanical transfer of pressure to pressure activated sensors as recited in Claims 1, 16, and 22 of the present invention. Therefore, the Applicants respectfully submit that the present invention, as recited in Claims 1, 16, and 22, is

not anticipated or rendered obvious by Kent alone or in combination with Donohue and that the rejections under 35 U.S.C. § 103(a) are overcome.

Claims 2-15 depend from Claim 1 and provide further limitations descriptive of the present invention. The Applicants respectfully submit that Kent, and Donohue do not show or suggest the present invention as recited in Claims 2-15 as these Claims are dependent upon an allowable base Claim and recite additional limitations. Accordingly, the Applicants respectfully assert that the rejections of Claims 2-15 under 35 U.S.C. 103 (a) are also overcome.

For example, in reference to Claim 2, the rejection indicates that the combination of Kent and Donohue teach a display mechanism that is disposed above a plurality of pressure activated sensors. However, the Applicants respectfully submit that the combination of Kent and Donohue do not teach or suggest the combination of a single-piece bezel-less cover enclosing a handheld electronic device is disposed over a top surface of said display mechanism that is disposed above a plurality of pressure activated sensors and operable to allow mechanical transfer of pressure to said display mechanism. Therefore, the Applicants respectfully submit that the claim limitation of Claim 2 is neither taught nor suggested by Kent alone or in combination with Donohue.

Referring now to Claim 3, the rejection indicates that the combination of Kent and Donohue teach a display mechanism that is in direct contact with a plurality of pressure activated sensors. However, the Applicants respectfully

submit that the combination of Kent and Donohue do not teach or suggest the combination of a single-piece bezel-less cover enclosing a handheld electronic device is disposed over a top surface of said display mechanism that is in direct contact with a plurality of pressure activated sensors and operable to allow mechanical transfer of pressure to said display mechanism. Therefore, the Applicants respectfully submit that the claim limitation of Claim 3 is neither taught nor suggested by Kent alone or in combination with Donohue.

Referring now to Claim 4, the rejection indicates that the combination of Kent and Donohue does not specifically teach the pressure activated sensors are disposed between the circuit layer and the display mechanism. The Applicants respectfully agree. The rejection further indicates that it would have been obvious to dispose the pressure activated sensors between the circuit layer and the display mechanism in order to easily measure small percentage changes in resistance. The Applicants respectfully submit that Kent teaches away from this in Column 5, lines 46-49 which states:

"In order to easily measure small percentage changes in resistance, the read-out electronics typically places force sensors 300 within a Wheatstone bridge."

Therefore, the Applicants respectfully submit that it would not have been obvious to dispose the pressure activated sensors between the circuit layer and the display mechanism as recited in Claim 4 of the present invention.

Referring now to Claims 5 and 17, the rejection indicates that although neither Kent nor Donohue specifically teach co-molding the transparent flexible

thermoplastic outer film to the supporting structure, it would have been obvious in order to provide a waterproof and dust free environment. The Applicants respectfully submit that this claim limitation is neither taught nor suggested by either Kent or Donohue. Furthermore, Donohue states in Column 8, lines 12-14, "...preferred touch pad enclosure 41 which completely seals the touch pad 21 from external contamination." The Applicants respectfully submit that a touch pad enclosure which completely seals the touch pad from external contamination would not derive further benefit from co-molding the outer film to the supporting structure in order to provide a waterproof and dust free environment. Therefore, the Applicants respectfully submit that the claim limitations recited in Claim 5 would not be rendered obvious by Kent alone or in combination with Donohue.

Referring now to Claims 6 and 18, the rejection indicates that the combination of Kent and Donohue teach a transparent flexible thermoplastic outer film that has sufficient deflection under external pressure to apply mechanical pressure to a display mechanism which applies pressure to a plurality of pressure activated sensors. However, the Applicants respectfully submit that the combination of Kent and Donohue do not teach or suggest the combination of a single-piece bezel-less cover enclosing a handheld electronic device and has sufficient deflection under external pressure to apply mechanical pressure to a display mechanism which applies pressure to a plurality of pressure activated sensors.. Therefore, the Applicants respectfully submit that the claim limitation of Claim 6 is neither taught nor suggested by Kent alone or in combination with Donohue.

Referring now to Claims 8, 14, 19, and 24, the rejection indicates that the combination of Kent and Donohue teach a single-piece bezel-less cover that has a flat top surface and is free of any indentation. However, neither Kent nor Donohue teach or suggest a single-piece bezel-less top cover for a handheld electronic device that encloses a display mechanism as recited in Claim 1 or the limitation that the cover has a flat top surface that is free of any indentation. Therefore, the Applicants respectfully submit that the claim limitation of Claim 8 is neither taught nor suggested by Kent alone or in combination with Donohue.

Referring now to Claim 10, the rejection indicates that the combination of Kent and Donohue teach a single-piece bezel-less top cover that is a transparent rigid cover. The Applicants respectfully submit that the cover taught by Donohue does not extend to or over the display mechanism as discussed above with reference to Claims 1, 16, and 22. The rigid cover taught by Donohue only covers the touch plate, not the entire device. Furthermore, Kent does not teach or suggest a cover of any sort. Therefore, the Applicants respectfully submit that the claim limitation recited in Claim 10 is neither taught nor suggested by Kent alone or in combination with Donohue.

Claims 17-21 depend from Claim 16 and provide further limitations descriptive of the present invention. The Applicants respectfully submit that Kent, and Donohue do not show or suggest the present invention as recited in Claims 17-21 as these Claims are dependent upon an allowable base Claim and recite

additional limitations. Accordingly, the Applicants respectfully assert that the rejections of Claims 17-21 under 35 U.S.C. 103 (a) are also overcome.

For example, the Applicants respectfully submit that the rejection of Claim 17 is overcome as discussed above with reference to Claim 5. Similarly, the Applicants respectfully submit that the rejection of Claim 19 is overcome as discussed above with reference to Claim 8.

Claims 23-25 depend from Claim 22 and provide further limitations descriptive of the present invention. The Applicants also respectfully submit that Kent, and Donohue do not show or suggest the present invention as recited in Claims 23-25 as these Claims are dependent upon an allowable base Claim and recite additional limitations. Accordingly, the Applicants respectfully assert that the rejections of Claims 23-25 under 35 U.S.C. 103 (a) are also overcome.

For example, the Applicants respectfully submit that the rejection of Claim 24 is overcome as discussed above with reference to Claim 8.

Claims 9, 20 and 23 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Kent in view of Donohue and further in view of Singh et al. (U.S. Patent No. 6,400,376) hereinafter referred to as "Singh." The Applicants respectfully submit that Kent and Donohue do not teach or suggest the combination of a single-piece bezel-less cover for an electronic device that allows mechanical transfer of pressure to pressure activated sensors as recited in Claims 1, 16, and 22

of the present invention. Singh does not overcome the shortcomings of Kent or Donohue.

Furthermore, the rejection indicates that Singh teaches an accelerometer operable to identify the parameters of a valid input event. The Applicants respectfully submit that the implementation taught by Singh teaches away from the present invention. For example, Singh teaches in Column 5, lines 46-52:

...The four corner touch responsive areas 26z are configured so that when any one of these corner areas 26z are touched by a user, a signal is generated to the processor 14 to place the device 10 in a panning mode. When the device 10 is in that panning mode, the processor 14 will suitably use signals from the sensor (e.g., accelerometers 30) to cause the portion of the virtual page to pan over the screen 24 in response to movement of the device 10...

The Applicants respectfully submit that the sequence of a touch sensing device used to trigger an accelerometer (e.g., panning mode) does not render obvious the claimed limitations of Claims 9, 20, and 23.

Therefore, the Applicants respectfully submit that the present invention, as recited in Claims 9, 20, and 23 is not rendered obvious by Kent in combination with Donohue and/or Singh. The Applicants further assert that Claims 9, 20, and 23 are dependent upon an allowable base Claims and recite additional limitations. Accordingly, the Applicants respectfully assert that the rejections of Claims 9, 20, and 23 under 35 U.S.C. 103 (a) are also overcome.

CONCLUSION

Based on the arguments presented above, the Applicants respectfully assert that Claims 1-25 overcome the rejections of record and, therefore, the Applicants respectfully solicit allowance of these Claims.

The Applicants have reviewed the references cited but not relied upon. The Applicants did not find these references to show or suggest the present claimed invention: U.S. 6,424,403, U.S. 5,510,813, U.S. 5,579,036, U.S. 6,483,498, U.S. 5,854,625, U.S. 5,357,061.


The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

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Respectfully submitted,

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